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Blodgettia saprophytica sp. nov. and *Uberispora tropicalis*, new records from southern China

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Abstract—A new species, *Blodgettia saprophytica*, is described and illustrated from specimens collected on dead branches in Guangxi Province, China. *Uberispora tropicalis* is newly recorded from China.

Key words—hyphomycetes, taxonomy

Introduction

Blodgettia Harv. (Harvey 1858), comprising algal and fungal elements, has commonly been considered an illegitimate name under the former ICBN Art. 70 (Stafleu et al. 1972) so that *Blodgettia* E.P. Wright (Wright 1881) has been used for the fungal element. However, Seifert et al. (2011), who interpreted Wright's treatment as emending *Blodgettia* Harv. by selecting the fungal element, as now required by the current International Code of Nomenclature (McNeill et al. 2012), regarded *Blodgettia bornetii* E.P. Wright as a later synonym of *B. confervoides*. Two other species, *B. indica* Subram. and *B. aquatica* Udaiyan, have been included in the genus (Subramanian 1954, Udaiyan 1992).

Here we propose an additional *Blodgettia* species on dead branches from southern China. We also report *Uberispora tropicalis* on dead branches as a new record from China.

Material & methods

Samples were processed, examined, and photographed following the methods described in Xia et al. (2014). Adobe Photoshop 7.0 was used to process individual

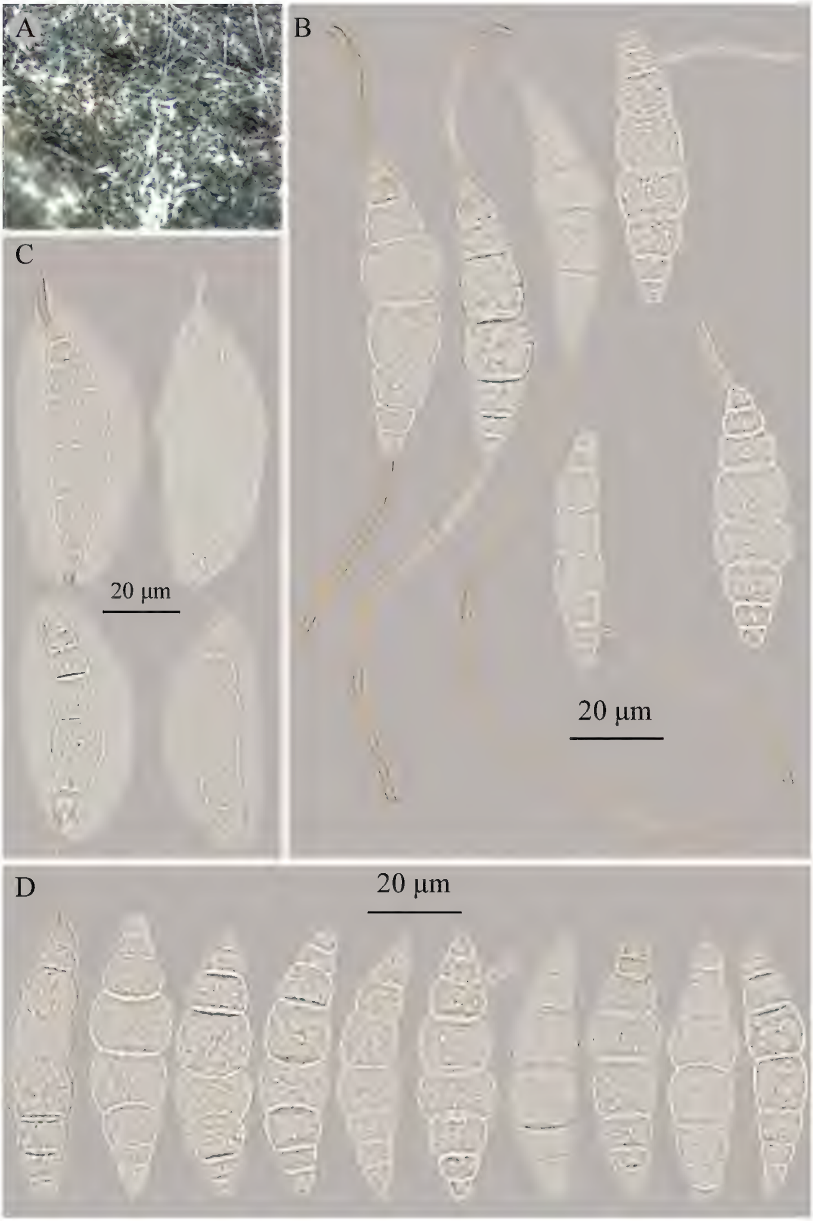

Fig. 1. *Blodgettia saprophytica* (holotype, HSAUP H7855). A. Colonies on natural substratum. B. Conidia and hyphae. C. Conidia covered by a mucilaginous tunica. D. Conidia.

images into photomicrographic plates, with backgrounds modified for esthetic reasons. In view of our failure to obtain cultures of this species, no molecular data are presented here. The specimens are deposited in the Herbarium of Department of Plant Pathology, Shandong Agricultural University, Taian, Shandong, China (HSAUP) and the Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences, Beijing, China (HMAS).

Blodgettia saprophytica C.L. Yang, Z. Li & X.G. Zhang, sp. nov. FIG. 1

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Differs from *Blodgettia aquatica* and *B. indica* by its larger, hyaline or subhyaline conidia with more numerous septa and their occasional coverage by a mucilaginous tunica.

TYPE: China, Guangxi Province, Nanning, Longhushan, on dead stems of unidentified broadleaf tree, 15 Nov. 2015, C.L. Yang (**Holotype**, HSAUP H7855; **isotype**, HMAS 245638).

ETYMOLOGY: In reference to the saprophytic habit on dead wood.

COLONIES on the natural substratum effuse, inosculating, hyaline or subhyaline, twinkling. Mycelium superficial and immersed, composed of very long and yellowish, mostly unbranched, aseptate, smooth hyphae. CONIDIA solitary, broadly fusiform, straight or slightly curved, moniliform, sometimes covered by a mucilaginous tunica, forming strings of eight cells, 7-septate, distinctly constricted at the septa, with the 2 middle cells greatly enlarged, and guttulate in every cell, globose or ellipsoidal, smooth, hyaline or subhyaline, the two apical cells attenuated and sometimes triangular, with a rounded tip, 52.5–64 × 11.5–17 µm.

COMMENTS—Among the known species, *Blodgettia saprophytica* slightly resembles *B. aquatica* and *B. indica* in conidial shape. However, the conidia of *B. aquatica* (32–52 × 15–25 µm, 3-5-septate; Udaiyan 1992) and *B. indica* (20–50 × 7.5–17.5 µm, 3–5(–6)-septate; Subramanian 1954) are smaller and have fewer septa than those of *B. saprophytica*. In addition, the conidia of *B. aquatica* and *B. indica* are not covered by a mucilaginous tunica.

Uberispora tropicalis Bhat & W.B. Kendr., Mycotaxon 49: 73, 1993. FIG. 2

COLONIES on natural substrate effuse, brown, velvety. CONIDIOPHORES mononematous, erect, straight or slightly flexuous, rarely branched, pale brown, 3–7-septate, 40–120 × 2.5–4.8 µm. CONIDIOGENOUS CELLS integrated, terminal, monoblastic, cylindrical, almost colorless, 8–18 × 0.85–2.6 µm. CONIDIA solitary, dry, septate, 17–22 µm diam, with a central thick-walled, dark brown, smooth, angular cell, 14–18 µm diam, and 3 lateral, almost colorless, conical cells with obtuse apices and truncate bases 7–14 × 8.5–12 µm, with a conico-truncate basal cell 1.5–4.5 × 1.3–2.6 µm, often carrying the upper

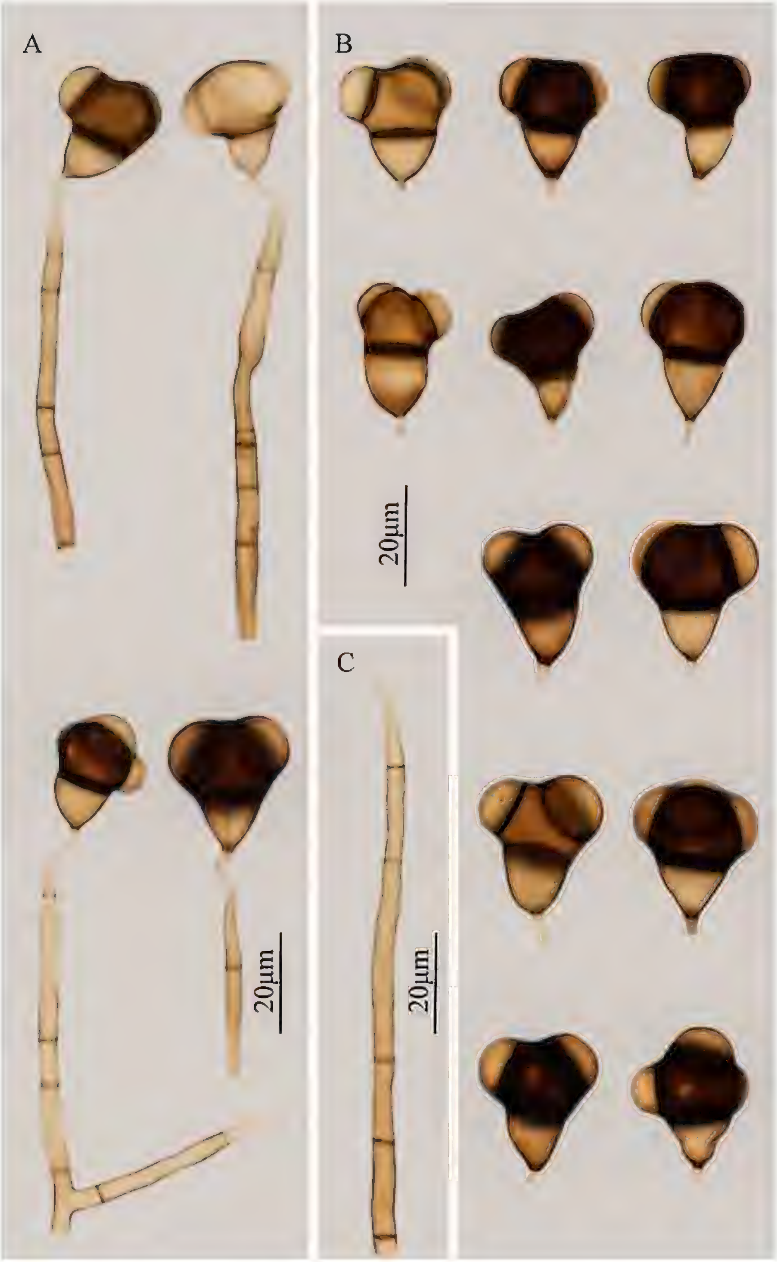

Fig. 2. *Uberispora tropicalis* (HSAUP H9783). A. Conidiophores, conidiogenous cells, and conidia. B. Conidia. C. Conidiophore and conidiogenous cell.

portion of the conidiogenous cell as a basal frill, seceding rhexolytically, with seceding conidia sometimes remaining attached to the side of the conidiophore by a wall remnant.

SPECIMEN EXAMINED: CHINA, GUANGXI PROVINCE: subtropical forest of Lengshui, on dead stems of unidentified broadleaf tree, 16 Nov. 2015, J.M. Gao (HSAUP H9783).

COMMENTS—*Uberispora tropicalis* is reported for the first time from China. The Chinese specimen closely matches the original description by Bhat & Kendrick (1993), except that the Chinese specimen has a curved and much narrower conidiogenous cell (0.85–2.6 µm vs 2.5–3.5 µm). However, in our opinion they are basically the same species.

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